

**WE CLAIM:**

1. A cove illumination module for illuminating a cove, the module comprising:
  - a) a substrate having one or more light-emitting elements operatively  
5 mounted thereon, said one or more light-emitting elements generating light having one or more wavelengths; and
  - b) an external housing unit sealingly connected to the substrate, said external housing element including one or more optical elements optically coupled to the one or more light-emitting elements, said one or  
10 more optical elements manipulating the light in a desired manner thereby illuminating the cove;wherein the substrate is adapted for connection to a source of power thereby enabling activation of the one or more light-emitting elements.
2. The cove illumination module according to claim 1 further comprising a heat  
15 sink thermally connected to the substrate.
3. The cove illumination module according to claim 1, wherein the substrate is configured as a metal core printed circuit board or a FR4 board.
4. The cove illumination module according to claim 1, further comprising a  
20 reflector mounted on the substrate, the reflector optically coupled to one or more of the light emitting elements.
5. The cove illumination module according to claim 4, wherein the reflector is configured as a linear reflector having a uniform longitudinal cross-sectional shape.
6. The cove illumination module according to claim 5, wherein the longitudinal  
25 cross sectional shape has one or more walls, the one or more walls being vertical, parabolic or sloped.
7. The cove illumination module according to claim 4, wherein the reflector is configured to generate an asymmetric beam of light or symmetric beam of light from the light generated by the light-emitting elements.

8. The cove illumination module according to claim 1, wherein the external housing unit is manufactured from a metal.
9. The cove illumination module according to claim 1, wherein the external housing unit and the one or more optical elements are integrally formed.
- 5 10. The cove illumination module according to claim 1, wherein the one or more optical elements are configured to generate an asymmetric beam of light or a symmetric beam of light from the light generated by the light-emitting elements.
11. The cove illumination module according to claim 1, wherein the one or more of the optical elements are configured as a lens.
- 10 12. The cove illumination module according to claim 10, wherein the lens is a lenticular lens, toroidal shaped lens, Fresnel lens or pillow lens.
13. A cove illumination system comprising two or more cove illumination modules according to claim 1, said two or more cove illumination modules operatively coupled for operation thereof.
- 15 14. The cove illumination system according to claim 13, wherein the two or more cove illumination modules are operatively connected by an environmentally sealable electrical connection.